

Introduction to Green Cleaning and Green Cleaning Programs

Training Manual

July 2009

Disclaimer:

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Notes:

Training Objectives

This training course is intended to cover New York State's Green Cleaning mandate and provide a basic understanding of cleaning, green cleaning products, and requirements of implementing a Green Cleaning Program.

Notes:

Introduction

This section provides:

- ☆ Introduction
- ☆ Training Objectives of the Course

Introduction

The New York State Office of General Services (OGS) designed this training course to provide an introduction to green cleaning and green cleaning programs. Topics covered in this training course are:

- New York State's Green Cleaning Products Mandate
- Reasons for Mandating Green Cleaning Products
- What is a Green Cleaning?
- Green Cleaning Chemical Products for Use in New York State Schools and State Buildings
- High Performance Cleaning Equipment
- Green Cleaning Program Stakeholders
- Implementing a Green Cleaning Program
- Green Cleaning Plan
- Green Cleaning Policies
- Cost of Greening the Cleaning Program
- Green Cleaning Training
- Potential Benefits of Green Cleaning Products and Programs

OGS's goal in developing this course is for participants to establish a basic understanding of, and requirements for, green cleaning and green cleaning programs.

Training Objectives

Terminal Objective

The terminal objective of this training course is to provide participants with an overarching knowledge of green cleaning and green cleaning programs.

Notes:

Enabling Objectives

Upon training completion, participants will be able to list or describe:

- New York States Green Cleaning Product Mandate and products currently covered under the mandate;
- Reasons for the green cleaning mandate;
- What green cleaning is about;
- Where to find OGS-approved cleaning products for use in schools and state facilities;
- Other non-chemical products used in green cleaning;
- Green cleaning program stakeholder benefits, and roles and responsibilities;
- Implementing a Green Cleaning Program;
- A green cleaning plan;
- Policies important to a Green Cleaning Program;
- Possible cost benefits and reductions in labor hours that can be realized;
- Key features of a green cleaning training program;
- Benefits of a Green Cleaning Program; and
- Features of the New York State Green Cleaning Program website.

Review of Section 1

- The introduction presented an overview of what the course will cover.
- Course objectives were stated.

Notes:

Green Cleaning and Green Cleaning Programs

This section will address:

- ★ New York State's Green Cleaning Products Mandate
 - ★ Reasons for Mandating Green Cleaning Products
 - ★ What is Green Cleaning?
 - ★ Green Cleaning Chemical Products for Use in New York State Schools and State Buildings
 - ★ High Performance Cleaning Equipment
 - ★ Green Cleaning Program Stakeholders
 - ★ Implementing a Green Cleaning Program
 - ★ Green Cleaning Plan
 - ★ Green Cleaning Policies
 - ★ Cost of Greening the Cleaning Program
 - ★ Green Cleaning Training
 - ★ Benefits of Green Cleaning Products and Programs
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New York State's Green Cleaning Products Mandates

Executive Order 4 (EO 4), , establishes a State Green Procurement and Agency Sustainability Program, which directs state agencies, public authorities and public benefit corporations to green their procurements and to implement sustainability initiatives, including green cleaning.. In addition, New York State amended the State Education Law Section 409-i and Finance Law Section 163-b (referred to as Chapter 584 of the Laws of 2005—*The New York State Green Cleaning Law*) to require mandatory use of environmentally sensitive (green) cleaning products in elementary and secondary schools. The intent of both the EO 134 and the *Green Cleaning Law* is to allow schools and state agencies to select cleaning products that minimize adverse impacts on children and employee health, and the environment. In amending the *Green Cleaning Law*, New York became the first state in the nation to require mandatory use of green cleaning products in all public and non-public elementary and secondary schools. The law has been in effect since September 1, 2006. The New York State Office of General Services (OGS) and

Notes:

its partner agencies—the State Education Department, Department of Health, Department of Labor and Department of Environmental Conservation—has created, and frequently updates, an approved list of green cleaning products for purchase and use. The OGS-approved Green Cleaning Products List is available on the New York State Green Cleaning Program website. The Green Cleaning Guidelines and Specifications and the OGS-approved Green Cleaning Products List are appropriate for use by both schools and state agencies.

The Guidelines and Specifications do not focus on re-creating every possible cleaning category, cleaning task, or cleaning surface, but instead provide a comprehensive overview focused on combining effective cleaning products with the appropriate tools to remove soil and microorganisms. The following product categories will address the vast majority of cleaning needs in schools and state facilities:

- cleaning products (general purpose, glass, bathroom, toilet, carpet and carpet spot cleaners);
- floor finish stripper products;
- floor finishing products;
- hand soaps; and
- vacuums.

As previously stated, New York State Green Cleaning Program website provides the most up-to-date approved cleaning products for both schools and state agencies to use. These products are searchable by product type, product name, and other properties. Remember, only OGS approved green cleaning products may be used within schools and state agency buildings.

Reasons for Mandating Green Cleaning Products

New York State introduced the legislation to reduce the exposure of children and school staff to potentially harmful chemicals and substances used in the cleaning and maintenance of school facilities. The following data support this decision:

- The United States Environmental Protection Agency (EPA) estimates that air pollutant levels can be two to five times, and occasionally up to 100 times, higher indoors than outdoors.
- Even more so than adults, children are vulnerable to, and may be severely affected by, exposure to chemicals, hazardous wastes and other environmental hazards.
- Schools have four times the number of occupants per square foot than most typical office buildings.
- Several studies have demonstrated links between chemicals used in institutional cleaning products and an increased occurrence of asthma and reproductive disorders.
- Children, teachers, and other school staff spend a significant part of their lives in school buildings. They are exposed to chemicals from cleaners, waxes, deodorizers and other maintenance products.

Notes:

- Health threats may be caused by the presence of chemicals, potentially resulting in increased costs to schools, districts and the state in terms of staff time and effort, cleanup costs, school closings, and student absenteeism.
- Discharges of chemicals from cleaning and maintenance products burden publicly owned wastewater treatment systems, and may end up in lakes and streams.
- Limiting the use of toxic cleaning products will reduce damage to the environment and the amount of hazardous waste requiring specialized disposal.
- There is an increasingly better selection and availability of green cleaning and maintenance products that have reduced concentrations of, or no, potentially harmful chemicals. Green cleaning products are the same in form, function, and utility as traditional products currently used in schools.

The impact of hazardous chemicals on custodial staff is also important to consider. Results of an 18-month Pollution Prevention Incentive for States Project undertaken in Santa Clara County, California revealed:

- Within the County, an average of six out of 100 janitors were injured each year - 20% of the injuries were serious burns to the eyes or skin.
- Medical treatment and lost job time from chemical injuries cost \$750,000 per year.
- A single custodial worker in the County uses, on average, 234 lbs. of chemicals annually (28 gallons); approximately 25% are hazardous substances.

In addition, the project team assessed injury claims from Washington State, which showed 290 janitors per year submitted injury claims - about a 0.8% annual claim rate. Washington State's chemical-related injuries included 43% eye irritation or burns, 36% skin irritation or burns, and 12% chemical fume inhalation incidents.

What is Green Cleaning?

It is important to note that implementing green cleaning in schools and state agencies is more than simply switching to the use of green cleaning products. The New York State Green Cleaning Program (Program) uses a holistic approach to both cleaning and maintenance of a facility. Specifically, it incorporates:

- Green cleaning chemicals and high performance cleaning equipment;
- Commitment and participation of building occupants (individuals taking ownership of their role in the success of a Green Cleaning Program);

Notes:

- Agreed upon green cleaning goals and objectives that are measurable and used to evaluate the effects of green cleaning;
- A green cleaning plan that stresses quality routine maintenance and focused attention on high traffic areas;
- A comprehensive custodial training program;
- Written step-by-step cleaning procedures that incorporate green cleaning best practices for custodial staff to learn and follow;
- Written facility policies that are relevant to a Green Cleaning Program;
- Educating building occupants about the green cleaning activities; and
- Communication of program successes and areas of improvement to stakeholders.

These components are consistent with well-recognized programs for facility operations and maintenance including the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design Ranking Systems and the New York State Education Department's High Performance Schools Guidelines (NY-CHPS).

The main components above make up the foundation for a comprehensive Green Cleaning Program. Creating a well-designed Program will provide health benefits (reduce sick days and absenteeism), promote increased productivity and learning, reduce liability through safety training, provide cost savings, and improve cleaning efficiency.

Green Cleaning Chemical Products for Use in Schools and State Buildings

Because of improvements in technology and manufacturing, the green cleaning products on the OGS-approved Green Cleaning Products List are as effective as traditional products and comparable in cost with the added benefit of being safer. Green cleaning products have undergone rigorous certification processes by organizations like Green Seal, Inc. and Ecologo to ensure they are effective and safe for the consumer and environment. For example, Green Seal has the *General-Purpose, Bathroom, Glass, and Carpet Cleaners Used for Industrial & Institutional Purposes (GS-37)* certification standards that evaluate performance, health and environmental impacts, packaging, associated training, and labeling.

Note:

- ✓ A revised GS-37 standard was released on August 29, 2008.
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Notes:

Currently, OGS approves green cleaning products in five categories: cleaners, floor-finish strippers, floor finishes, hand soaps and vacuums. Products approved for facility use must meet the criteria established under the OGS Guidelines and Specifications. The OGS Guidelines and Specifications are regularly evaluated and improved, and the product list is updated as appropriate. Therefore, it is best to consult the most current OGS Guidelines and Specifications and the OGS-Approved Green Cleaning Products List prior to purchasing cleaning products.

High Performance Cleaning Equipment

Along with improved green cleaning chemicals, innovations in high performance cleaning equipment have significantly developed. High performance equipment can effectively capture and remove more soil with the use of fewer chemicals than traditional equipment. Performance advancements include products such as microfiber materials and special vacuum cleaner air filters called high efficiency particulate air (HEPA) filters. Below are examples of these and other high performance equipment and their importance in green cleaning:

- Microfiber cloths, mop heads and dusters:
 - Offer greater absorbency of soil (picks up more);
 - Keep soil from re-depositing on surfaces by trapping soil within the fibers;
 - Reduce the amount of chemicals used; and
 - Can be laundered and reused repeatedly.
- Green Label-certified vacuums with HEPA filters (see note below):
 - Improve indoor air quality by trapping 99.96 % of small particles down to 0.3 microns in size (25,400 Microns are in one inch) that would otherwise be released back into the room; and
 - Meet the high performance standards of the Carpet and Rug Institute.
Note: OGS uses Seal of Approval/Green Label certification as the standard for vacuum cleaners; wet/dry vacuums are not Green Label certified.
- Floor machines that rotate special pads against the floor to remove or polish the top layer of floor finish can create airborne dust. However, floor machines equipped with dust collection systems keep dust from becoming airborne during floor burnishing.

Other examples of high performance cleaning equipment can be found on the Best Practices section of the New York State Green Cleaning Program website.

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Note:

- ✓ The original Green Label standard will be phased out in 2010 and replaced by a more stringent Seal of Approval/Green Label certified standard.
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Green Cleaning Program Stakeholders

The responsibility (ownership) of a Green Cleaning Program is shared among many stakeholders; **the success of a green cleaning program does not fall solely upon the custodial staff**. Described below are typical stakeholders, the benefits they may realize from implementing a Green Cleaning Program, and their roles and responsibilities. The exact roles and responsibilities of each stakeholder group are determined during the initial stages of developing a Green Cleaning Program.

Note:

- ✓ A Green Cleaning Team (Team) should be composed of a designated leader and at least one **representative** of each stakeholder group. The Team manages and guides the development and implementation of the Green Cleaning Program and acts as the cohesive voice for stakeholders. The school or state Health and Safety Committee should include representatives of these groups and may be able to help develop or enhance the green cleaning program. Alternatively, a separate green cleaning team should be created, so that representatives of the community's groups can come to a consensus on green cleaning policies and procedures during program development.
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Administration/School Board/State Executives

Benefits

- The administrative staff, school board and state executives will have a sense of accomplishment knowing that they are providing a healthier environment for building occupants.
 - Supporting and implementing a Green Cleaning Program sends a positive message to building occupants and custodial staff of their commitment towards improving the building's indoor environment.
 - After establishing a Program, the school or state agency could be saving money by reducing chemical usage. Some schools have reduced chemical cost by as much as 50% through implementation of a green cleaning program.
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Notes:

- Administrative and executive staffs working in the building will enjoy a healthier work environment.

Roles/Responsibilities

- Communicate regularly on the progress of the Program, and inspire accomplishment and pride in all other stakeholder groups.
- Promote the Program and the building's transition to a healthier, cleaner and more environmentally conscious facility.
- Provide support and encouragement to custodial staff.
- Participate as members and leaders of a Green Cleaning Team..
- Create or update facility policies that support the Green Cleaning Program and enforce them!

Unions**Benefits**

- A Green Cleaning Program will provide a healthier work environment for its members.
- The Program will establish comprehensive training requirements for custodial staff thereby improving worker safety and creating a knowledgeable workforce.

Roles/Responsibilities

- Unions can provide support to their members and encourage facility officials to implement a Program.

Buildings and Grounds and Custodial Supervisor**Benefits**

- A comprehensive Green Cleaning Program addresses the proper use of cleaning products and equipment, and helps ensure the correct use of green cleaning methods and procedures.
- The quality of work throughout the facility will be uniform because all custodial staff will be trained to follow the same cleaning procedures.
- A Green Cleaning Program will provide the necessary tools to effectively evaluate cleaning efforts and custodial performance.
- Proper implementation of routine cleaning tasks will extend the time between labor-intensive tasks (i.e., burnishing and stripping/finishing floors).

Roles/Responsibilities

- Communicate regularly with stakeholders on progress and challenges in implementing the Program and continually promote the transition to a healthier, cleaner, and environmentally conscious facility.

Notes:

- Provide support and encouragement to custodial staff.
- Listen to custodial staff and value their input on maintenance and routine procedures.
- Provide custodial staff ways to provide feedback.
- Inspect custodial work on a regular basis to ensure proper procedures are being followed.
- Communicate regularly to building occupants and administrative staff on the Program's progress including successes, challenges, and ways they can help.
- Provide in-house training or coordinate with vendors to conduct training on product use to all custodial staff.

Custodial Staff

Benefits

- Of all the stakeholders, custodial staff will benefit the most from switching to green cleaning products and implementing a Green Cleaning Program.
- Custodial staff will receive valuable training, work more efficiently, and are less likely to be injured.

Roles/Responsibilities

- Police and maintain high traffic areas like entryways, especially during the winter.
- Scan floors for unreported spills.
- Attend training on green cleaning products and procedures.
- Follow written cleaning procedures and provide constructive feedback to custodial supervisors on ideas for improvement.

Teachers/Staff/Employees

Benefits

- A healthy indoor environment creates a productive workplace for teachers and directly results in a better education for students.
- Teachers are more effective at teaching when they are healthy and less likely to be absent.
- Provides an opportunity for integrating environmental and health initiatives into the classroom.

Roles/Responsibilities

- Teachers should limit eating and preparing food in classrooms to reduce the occurrence of spills and the presence of pests.

Notes:

- Report spills in a timely manner.
- Do not bring in cleaning solutions and chemicals from home.
- Do not request students bring in disinfectant wipes or alcohol based hand sanitizers into school. Instead, use only cleaning solutions provided by the school after being properly trained by the custodial staff on their safe use.
- Provide feedback on the Green Cleaning Program.
- Eliminate unnecessary clutter in classrooms and offices that hinder custodial cleaning efforts. Work with custodial staff to facilitate easier and effective cleaning (i.e., placing chairs on tops of desks as requested, arranging desks and classroom furniture to optimize the efficiency of floor sweeping).

School Nurse

Benefits

- The student population and staff will likely be healthier.
- Possible reductions in asthma and respiratory symptoms caused by allergens and chemicals.
- Reduced occurrence of chemical accidents.

Roles/Responsibilities

- School nurses can document student illnesses, visits to the nurse's office, and assist in processing this information to track and determine the health impacts a of Green Cleaning Program. This information can also be used to evaluate what building maintenance and cleaning activities may have negative health impacts.

Students

Benefits

- Children's physical and mental health can be severely affected by chemicals and other environmental hazards. Increased rates of asthma, cancer, and behavioral disorders have been associated with contaminants in the environment. Studies have found that there is a connection between a clean school environment and improved learning, reduced absenteeism and better test scores.

Roles/Responsibilities

- Reduce the amount of soil they bring into the school by wiping their feet on entryway walk-off matting.
- Dispose of garbage properly, and pick up after themselves and others.
- Be more aware of their impact on the building's cleanliness and be considerate and appreciative of custodial staff and their work.

Notes:

Parents

Benefits

- Their children will be healthier due to reduced chemical use in school buildings.
- Children will be attending a healthier school whose leadership demonstrates a concern for their well-being.

Roles/Responsibilities

- Parents are important stakeholders in a Green Cleaning Program and should be active members in supporting the Program in their children's schools.
- Support the Program to help ensure compliance.
- Initiate fund-raising to purchase green cleaning products and equipment.
- Provide the school with any comments or concerns about the effectiveness of the Program.

Implementing a Green Cleaning Program: Five Steps to a Green Cleaning Program

Step 1: Groundwork

- Identify program stakeholders.
- Create a Green Cleaning Team (Team) of representatives from all stakeholder groups.
- Identify a Team leader.
- Develop consensus among program stakeholders.
- Communicate the process of developing and implementing a Green Cleaning Program to facility stakeholders (see note below).

Step 2: Assessments

- Perform a Baseline Facility Assessment (Assessment).
- Characterize the facility population.
- Document chemical and equipment inventories.
- Document the current training program.
- Document current cleaning plans and policies.

Step 3: Planning

- Establish goals and objectives based on the Assessment.
- Identify benchmarks for measuring goal attainment.
- Develop and write a Green Cleaning Program that meets the identified goals and objectives.

Notes:

- Formalize the Program.
- Communicate the contents of the Program to stakeholders and building occupants.

Step 4: Implementation

- Roll out the Program.
- Implement corrective actions when needed.
- Recognize stakeholders who champion the efforts and provide support to the Program. Ask stakeholders for ideas that contribute to making the Program a success.

Step 5: Evaluation

- Assess the Program's measurable benchmarks to determine its effectiveness after a set period of time.
- Document successes and identify area for improvement, Report findings to stakeholders.
- Modify the Program to include new goals and objectives that address improvements.
- After the evaluation, start a new cycle of implementation and improvements.

Note:

- ✓ OGS provides an *Introduction to Green Cleaning* brochure for download from the Customizable Documents and Templates section of the New York State Green Cleaning Program website. The brochure may be used and modified by a facility to promote and inform stakeholders of efforts to establish a Green Cleaning Program.
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Green Cleaning Plan

A cleaning plan provides the foundation for cleaning and maintenance activities in a facility and documents the frequency, required time, and required chemicals and equipment for specific Program activities and procedures. A green cleaning plan incorporates green cleaning Best Practices. OGS lists several Best Practices on the New York State Green Cleaning Program website. Green cleaning Best Practices include properly fitting entryways with walk-off mats to reduce the amount of soil entering the building, the use of high performance equipment to improve indoor air quality, and focused routine maintenance practices. Identifying high traffic areas and ensuring they are maintained correctly each day will extend the time between more labor-intensive maintenance efforts like floor stripping and refinishing.

Notes:

Green Cleaning Policies

A school or facility can institute several green cleaning policies to strengthen their Green Cleaning Program. The following are examples of policies that should be adopted:

- **Cleaning product use by non-custodial staff.** The facility should create a policy of which under no circumstance should non-approved cleaning products be brought from home and used in the facilities. The policy should ensure that staff are provided with access to an OGS-approved general purpose cleaner and are trained to use it.
- **Entryway maintenance and upkeep.** Properly maintained entryways decrease the amount of soil and debris entering the facility. The Customizable Documents and Templates section of the New York State Green Cleaning Program website has an example policy for the upkeep and maintenance of entryways.
- **Custodial training requirements.** Training requirements should be instituted for handling chemical, equipment use, and cleaning procedures. The requirements should detail what training is required to perform specific tasks. In addition, the training policy should also include refresher requirements and recordkeeping. The Customizable Documents and Templates section of the New York State Green Cleaning Program website has a downloadable recordkeeping spreadsheet to assist in tracking custodial training. Requiring staff training demonstrates a facility's commitment to continued staff development and improved safety measures.
- **Disinfectant Use Policy.** A disinfectant use policy establishes the requirements for limiting disinfectant use to certain surfaces found in food service areas, restrooms, locker rooms, nurse offices, and other specified areas. The policy prevents the overuse and waste of disinfectants, sanitizers, or other special cleaning practices by defining their proper use as required by health, education, labor, and environmental regulations.

The creation of green cleaning policies will help further the success of a Green Cleaning Program by establishing guidance from which procedures can be developed.

Notes:

Cost of Greening the Cleaning Program

Chemical Costs

Many green cleaning products that offer the same cleaning power as traditional products are cost-competitive. Because many green cleaning products are sold in concentrated form, and used for multiple cleaning tasks, the actual “use cost” may even be less than some traditional “ready-to-use” products. To evaluate the cost-effectiveness of a green cleaning product, take into account its final dilution volume, shipping costs, possible reduction of work-related injuries, and increased productivity due to a healthier work environment. In addition, facilities can save on chemical storage space by purchasing concentrated products. For a quick way to calculate and compare actual washing or mopping solution costs for various cleaning products, visit the Cost Calculator on the OGS-Approved Green Cleaning Products List on the New York State Green Cleaning Program website.

Labor Hours

Because of its large surface area and the wear and tear of day-to-day traffic, floor care is one of the most important components of a cleaning program and also the most labor intensive. A Green Cleaning Program focuses on extending the life of flooring by doing less time consuming and labor-intensive cleaning tasks, and using appropriate cleaning products and equipment. An effective routine maintenance program **delays** the need for floor burnishing, stripping and refinishing activities; all of which are labor-intensive.

Selecting quality green cleaning floor care products can help facilities reduce labor hours.

For example:

- Fast acting floor strippers quickly dissolve floor finishes, speed up the floor stripping process, and reduce the time that custodians are exposed to chemicals.
- Durable floor finishes:
 - Withstand day-to-day traffic;
 - Do not require stripping and refinishing for 3 or more years;
 - Require less burnishing and do not powder easily; and
 - Are easy to maintain and clean.
- Effective general-purpose cleaners that, when properly diluted, do not require a rinse step because they leave no residue and are designed to work when diluted with cold water. This saves custodial time and effort in maintaining floor finish.

Notes:

Note:

- ✓ All general-purpose cleaners that are Green Seal-certified work effectively with cold water. In addition, mops used with a good general purpose cleaner can be cleaned with just a cold water rinse.
 - ✓ Floor care products are listed on the OGS-Approved Green Cleaning Products List on the New York State Green Cleaning Program website.
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Green Cleaning Training

Custodial staff development is an important aspect of a successful Green Cleaning Program. With proper training, the custodial staff will become a major resource in implementing a Program. All facilities should have training programs that meet Occupational Health and Safety Administration training requirements in addition to handling chemicals, using and maintaining power equipment, and cleaning policies and procedures. Training programs should include:

- Established training requirements for custodial staff;
- Refresher training on cleaning practices and established procedures at set frequencies (e.g. annually);
- Materials that cover step-by-step instructions for the proper dilution, disposal, and use of cleaning products;
- Sessions provided by suppliers or manufacturer's representatives that demonstrate the proper use of products;

Note: Manufacturers, distributors and other third parties providing training should include step-by-step instructions for the proper dilution, use, and disposal of products, and the proper use of equipment. They should also provide product-labeling systems that are usable by a wide array of personnel including those that are non-English speaking or have difficulty reading. Save videotaped training provided by the suppliers and manufacturers for future or refresher training sessions.

- The use of materials such as videos, web-based training sessions and written texts that cover topics such as the proper use and handling of chemical products, operation of high-performance cleaning equipment, eliminating cross-contamination, and proper cleaning of floors and restrooms;

Notes:

- Tracking and documenting the training of all custodial staff to ensure compliance with state and federal regulations and ensure staff is knowledgeable of the Green Cleaning Program's policies and procedures;
- Opportunities for faculty and administrative staff training on the proper use of the facility's general green cleaning products; and
- Follow-up with inspections to ensure that the staff has learned the procedures and are applying them correctly.

Potential Benefits of Green Cleaning Products and Programs

Implementation of a comprehensive Green Cleaning Program that includes the use of green cleaning products, equipment and best practices can result in many benefits. Some of these benefits are listed below. You may be able to think of more.

Health and Well Being

- Reduced exposure to toxic chemicals.
- Reduced dust and chemical allergens that trigger asthma attacks.
- Improved indoor air quality by reducing airborne dust and chemical gases.

Safety

- Improved training programs that stress safety.
- Reduced exposure to toxic and dangerous chemicals.
- Safer handling of chemicals through using automatic dilution dispensers.
- Improved control of chemical inventory and storage locations.
- Improved maintenance of powered cleaning equipment.

Cleaning Efficiency

- Reduced amount of dirt and soil tracked into the building by using appropriate sized walk-off mats.
- Improved training on efficient cleaning products, equipment and procedures.
- Improved cleaning processes and systems.
- Promotion of increased productivity and learning.
- Reduced frequency of labor-intensive tasks through frequent cleaning and maintenance activities.

Notes:

Financial

- Reduced chemical use and the quantity of cleaning chemicals needed.
- Reduced injuries to custodial staff and Worker Compensation claims.
- Promotion of a healthier environment for teachers and children (possibly lowering sick days and absenteeism).
- Better inventory management of chemicals and equipment resulting in more efficient and better-planned procurement of goods.
- Reduced frequency of labor-intensive tasks such as refinishing floors.

Legal

- Meet obligations of the *New York State Green Cleaning Law* and EO 134. Under these laws, schools and agencies are required to purchase and use only OGS-approved green cleaning products. They are not required to develop a Green Cleaning Program; however, full benefits of the products are realized when are one component of a complete Green Cleaning Program.

Community

- Programs provide a sense of community among stakeholders.
- Efforts of the custodial staff and other stakeholders are recognized.
- All facility occupants are encouraged to play a role in the success of the program - increasing the sense of building ownership by all stakeholders.

Environment and Sustainability

- Lowered environmental impact/footprint of the facility.
- Improved indoor air quality, energy usage and recycling.
- Recognized compatibility with many of the components of the *New York Collaborative for High Performance Schools: High Performance Schools Guidelines* (NY-CHPS) program and the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Certification program. The LEED certification program specifically gives credits for various components of the facility Green Cleaning Program that may boost its LEED certification level.

Notes:

The OGS Green Cleaning Website

OGS created a comprehensive website dedicated to providing schools and state facilities with the information and tools needed for developing an effective Green Cleaning Program. Creating a Program is not required under *Green Cleaning Law*; however, green cleaning programs have real benefits, many of which have been described in this training course. Using resources from the New York State Green Cleaning Program website, schools and facilities can easily begin implementing a Green Cleaning Program to fit their needs and budget. The New York State Green Cleaning Program website provides a central resource of information including:

- Benefits of Green Cleaning;
- Policies, Guidelines and Reports;
- The OGS-Approved Green Cleaning Products List;
- Best Practices;
- Frequently Asked Questions;
- Five Steps to a Green Cleaning Program Toolkit;
- Customizable Documents and Templates;
- Online Training; and
- Additional Resources.

Note: The materials in the Customizable Documents and Templates section of the website are in formats that, once downloaded, can be modified and customized by the facility to meet their specific needs.

Training Course Review

The following topics in the *Introduction to Green Cleaning and Green Cleaning Programs* training manual were covered:

- New York State Green Cleaning Product Mandates and products currently covered under the mandates;
- Reasons for creating the green cleaning mandates;
- A description of green cleaning;
- A description of chemical products and equipment used in green cleaning and green cleaning programs;
- Green cleaning products approved for purchase by schools and state agencies;
- Green cleaning program stakeholders, their benefits, and roles and responsibilities;

Notes:

- The Five Steps to a Green Cleaning Program toolkit;
- A description of a green cleaning plan and the importance of developing policies as a component of a Green Cleaning Program;
- Possible cost benefits and reductions in labor hours realized through implementation of a Green Cleaning Program;
- Key features of green cleaning training;
- Benefits of a Green Cleaning Program; and
- Features of the New York State Green Cleaning Program website.

Notes:

S E C T I O N 3

Course Evaluation

This Section will Address:

- ☆ Course Evaluation
- ☆ Certificate of Course Completion

The course evaluation is vital for fine-tuning future versions of this course. **Please do not disregard the course evaluation, your feedback is important!** Please complete the course evaluation.

All participants who completed the online course will receive an electronic *Certificate of Course Completion* through the New York State Green Cleaning Program website.

Notes:

Useful Websites and Resources

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